Amendments to the Claims

Please amend claim 50 as follows.

1. (Previously Presented) The display engine of claim 16 further comprising:
an illumination source constructed and arranged to provide illumination light and
a collimating lens constructed and arranged to receive and collimate the illumination light;

2. (Previously Presented) The display engine of claim 1 further comprising a selective reflector positioned to receive the illumination light from the collimating lens and to direct the illumination light to the microlens array.

3. (Previously Presented) The display engine of claim 2 in which the selective reflector is constructed and arranged to transmit the illumination light from the pixel apertures toward the display screen.

4. (Previously Presented) The display engine of claim 3 in which the selective reflector includes a beamsplitter.

5. (Previously Presented) The display engine of claim 1 in which the microelectrical mechanical reflector array is formed on a planar substrate and the plural microelectrical mechanical actuators support the reflectors on actuator arms that in the actuated state are co-planar with the substrate and the reflectors.

6-10. (Canceled)

11. (Previously Presented) The display engine of claim 1 in which the illumination source includes only one light source.

12. (Previously Presented) The display engine of claim 28 in which the display screen is a transmissive display screen.

13. (Previously Presented) The display engine of claim 1 in which the illumination source is monochromatic.

14. (Previously Presented) The display engine of claim 1 in which the illumination source is polychromatic.

15. (Previously Presented) The display engine of claim 14 in which the illumination source is constructed and arranged to provide different chromatic segments of the illumination light over different successive tune periods.

16. (Previously Presented) A microelectrical mechanical optical display engine, comprising:

a microlens array having an array of plural lenslets for receiving and directing illumination light;

an aperture plate through which plural pixel apertures extend, the plural pixel apertures being aligned with and to receive illumination light from the plural lenslets of the microlens array; and

a microelectrical mechanical reflector array positioned opposite the aperture plate from the microlens array, the microelectrical mechanical reflector array including plural microelectrical mechanical actuators that support reflectors in alignment with the plural pixel apertures to receive and reflect the illumination light, the plural microelectrical mechanical actuators being constructed and arranged to orient the reflectors selectively to direct the illumination light back through the pixel apertures or against the aperture plate, wherein a microelectrical mechanical actuator is placed in an actuated state having an actuated position by an actuation voltage and held in a storage state to maintain the actuated position by a storage voltage, wherein the storage voltage is less than the actuation voltage.

17. (Original) The display engine of claim 16 in which the microelectrical mechanical actuators are electrostatic microelectrical mechanical actuators.

18. (Previously Presented) The display engine of claim 17 in which the microelectrical mechanical actuators have actuated and released states, only one of which requires electrostatic activation.

19. (Original) The display engine of claim 17 in which the plural microelectrical mechanical actuators support the reflectors on actuator arms that are formed as bimorphs having a characteristic residual stress.

20. (Previously Presented) The display engine of claim 19 in which the microelectrical mechanical actuators include an electrostatic activation electrode that applies a force against the characteristic residual stress of the actuator arms.

21. (Previously Presented) The display engine of claim 20 in which the microelectrical mechanical actuators are constructed and arranged to orient the reflectors selectively according to drive signals provided by a display driver, the engine further comprising an orientation storage system separate from the electrostatic activation electrode to selectively hold the microelectrical mechanical actuators in the storage state.

22-27. (Canceled)

28. (Previously Presented) The display engine of claim 16, further comprising a display screen that receives the illumination light reflected from the microelectrical mechanical reflector array.

29-47. (Canceled)

48. (Previously Presented) The display engine of claim 16 wherein each microelectrical mechanical actuator includes:

a substrate;

an arm having a first end anchored to the substrate and a free end extending over the substrate, the arm having a bottom surface facing the substrate and a top surface opposite the bottom surface;

a reflector extending over the top surface of the free end of the arm;

an electrostatic activation electrode supported by the substrate and facing the bottom surface of the arm, the electrode, when activated by the actuation voltage, providing an electrical force sufficient to move the free end of the arm; and

an electrostatic lock, supported by the substrate and facing the bottom surface of the arm, the electrostatic lock, when activated by the storage voltage, providing an electrical force sufficient to hold the free end of the arm in position.

49. (Previously Presented) The display engine of claim 48 wherein each microelectrical mechanical actuator includes at least one stand-off dimple, the dimple spacing the free end of the arm away from the substrate.

50. (Currently Amended) The display engine of claim 48 wherein the top surface of the arm includes at least one flex score extending across at least a portion of a width of the arm, wherein the free end of the arm proximate to the reflector is free of the at least one flex score.

51. (Previously Presented) The display engine of claim 48 wherein the electrostatic lock is supported by the substrate beneath the free end of the arm.

52. (Previously Presented) The display engine of claim 48 wherein the arm is formed of a bimorph material, the material having a relaxed state.

53. (Previously Presented) The display engine of claim 52 wherein the arm flexes away from the substrate in the relaxed state.